EFFECTIVE TREATMENT COMPLETION STRATEGIES

Jane Moore, RN, MHSA

LEARNING OBJECTIVES

- Define treatment completion.
- Identify at least three barriers that may interfere with treatment completion.
- Discuss barriers to adherence and strategies to improve adherence
- Identify at least two strategies for dealing with "lost" patients and determine when to consider a case "closed."
- Using electronic means to assure compliance

CDC Definition of completion of treatment:

- Ingestion within 12 months
  - Calculations exclude patients with initial isolate resistant to rifampin and children with meningeal, bone, joint or miliary TB
  - Also excluded are those who die during treatment or leave the country

Single most effective strategy for improving completion of therapy

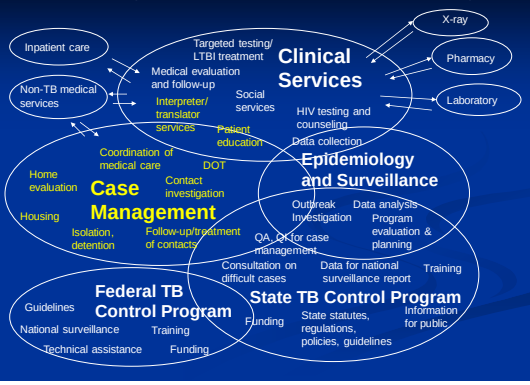
Case management

- Appropriate treatment regimen
  - Right drugs, right dosages, right number of doses, right treatment length
- Supervision of treatment, i.e. DOT
- Documentation of treatment
- Appropriate monitoring of cases during treatment

Case management

- Communications
  - Between providers
    - HD & community providers
    - TB team
  - Between case manager and patient
- Assessment of barriers and implementation of strategies to overcome the barrier
- Adequate staff training
- Well known and documented policies and procedures

The Virginia View of a TB Control Program



Non-adherent patient behavior

- Treatment is long & boring
- Patients feel better early in treatment
  - 2-3 months after treatment start is "danger" zone
- The "control" thing
- Too much medicine at one time
  - Divided dosing is a problem

Non-adherent clinician behavior

- Failure to prescribe enough drugs (PZA) (EMB)
- Failure to prescribe treatment for long enough
- Failure to prescribe correct dosages of medications
- Failure to obtain and review susceptibility results
- Quick discontinuance for side effects without re-challenge

Other medical problems

- Diabetes
- End stage renal disease
- Other prescribed medications
- Malabsorption
- Mental illness
- Substance abuse
- Side effects and toxicity to treatment

Drug resistance

- Requires treatment regimens that:
  - Have more side effects
  - Require longer treatment
  - May require twice a day dosing
  - Usually cannot use intermittent regimens – daily required for entire treatment length
- Can be acquired during treatment in spite of best efforts

Types of barriers to treatment completion

Assessment of barriers to treatment a critical component of case management

Operational barriers

- Operational factors preventing service delivery to the patient

Patient related barriers

- Factors which prevent the patient from accepting/receiving services

Provider related barriers

- Factors which prevent the caregiver from providing adequate services to the patient

Assessment of Risk for Non-adherence to Therapy

Another critical component of case management activities

Risk factors for non-adherence to therapy

- Re-treatment cases also previous preventive therapy
- Drug resistance
- Failed on other medicines or regimens
- Substance abusers
- Cultural beliefs
- Immigration status

At risk for non-adherence (continued)

- Limited or no English
- Children and Teenagers
- Memory Loss
- Mental illness/retardation
- Sick patients with other medical/side effects (HIV)
- Anyone (especially ***especially*** health care workers)

Do assessment of potential risks initially and document in record

Prevention of adherence problems

- Extensive and intensive patient education
  - Should start during the initial contact
  - Continue at every contact with provider, case manager, outreach (DOT) worker
- Assess for cultural barriers and cultural stigma
  - Accommodate and mediate as needed
  - Discuss non-negotiable issues
- Multiple medical providers

Assessment

- Is the patient keeping appointments?
- Is the patient swallowing the meds?
- Is the patient clinically improving on therapy?
- Are the sputum results improving?
- Assess relationship with the caregiver.
- Any reason to believe tricks going on?
- Is the shrubbery outside dying?

Locating the "Lost"

- Utility companies
- Telephone and "e-search"
- Postal Service
  - CFR 265.6(d)(5)(i) – Disclosure of names & addresses
- Neighbors, coworkers, social contacts
- Pictures
- Shelters, hospitals, jails
- Follow the money

Treatment Completion Strategies

Consider all for Directly Observed Therapy (DOT)

- Standard of Care-
  - Treatment of Tuberculosis (MMWR 2003; 52 No. RR-11)
- Easier to start DOT from the beginning

D.O.T. – did it really go down?

Training for DOT workers is critical

- The swallow
- The liquid check
- The cough
- The hand check

Incentives and Enablers

- Appeals to everyone, young and old
- Small or large
- Give on a regular basis or for special occasions
- Bribery DOES work!

Incentives and Enablers (2)

- Incentives -Can be goods, services, food, anything
- Enablers- transportation related, baby sitting
- Both must be tailored to the individual!

Other strategies to remove barriers

- Social work interventions
- Housing support
- Nutritional support
- Interpreter/Language line
- Alcohol/drug treatment
- Mental health/other agencies
- Make DOT a condition of probation

When all else fails…….

The "control" part kicks in

Legal Interventions

- Actions dependent on your laws, policies and procedures
- Escalating and increasing severity
- Must document all episodes of non-adherence
- Must show that the Health Department has made the extra effort
- "least restrictive means"
- Public good versus civil liberties
- Build the case from the beginning

Legal Interventions (2)

- Sample legal interventions
  - Investigation
  - Counseling order
  - Outpatient treatment order
  - Court ordered DOT
  - Home isolation with electronic monitoring
  - Emergency detention
  - Formal involuntary isolation order

Involuntary isolation

- Laws define when/where confinement may occur
- Sentences differ from weeks to months
- Facility may be prison, hospital or other facility with negative pressure
  - Enforcement of isolation may be an issue

Advantages

- Only choice for hopelessly non-compliant or threatening
- Protects the public health

Disadvantages

- Still cannot force patient to take medicines
- Very costly
- In some states must let patient go when sputum smears negative
- Individual rights vs the public health

Due Process for any court action

- Patient is entitled to a formal hearing
- Patient should/must be represented by legal counsel

Court-ordered isolation

- Court order for 120 days of isolation
  - Can be shorter time if person no long poses a substantial threat to the health of others
- Location of isolation – least restrictive
  - Residence (may be with electronic device)
  - Institution
  - Other place

Monitoring if not on DOT

- Use of technology for treatment compliance
  - Push in this arena
  - Pitfalls
- Pill counts
- Pharmacy monitoring
- Serum levels

Video Enhanced Therapy VET

- Requirements for VET
  - Pansensitive
  - Completed initial phase with 90% adherence
  - Smear conversion
  - Clinical improvement
  - No severe adverse reactions
  - No language barriers
  - Client has the tech!

VET

- Resistance to any first line drug
- Under age 18
- Medical risk factors
- Alcohol or drug abuse
- Mental illness

VET

- Below 90% compliance
- Clinical status worsens
- Severe adverse reaction
- Client tech failure on more than one occasion

VET PROCEDURES

Prior to VET

- Review record for changes/issues
- Assure confidential location for VET – both client and provider
- Identify client
  - Do not use full name – locally developed code number, initials.
- Confirm client in private, confidential location

VET

- Review signs and symptoms of disease and adverse reactions/side effects
- Open med packet
  - Solid well-lit surface
  - Liquid on display on surface
  - Verify correct number and type of medications
- Oberve individual ingesting meds
  - Mouth check
  - Keep them talking to help identify of tongues or cheeked

VET FAILURE! DO NOT COUNT

- Client moves out of visual field for any reason
- Any pills are dropped
- Equipment malfunctions
- Client coughs into hand or tissue
- Suspicion

Remaining Steps

- Finalize consent form
- Issues with OIM and security
- Ready for select, limited use until OIM issues addressed.

Questions?